November 8, 2010

Water Docket
U.S. Environmental Protection Agency
Mail Code: 2822T
1200 Pennsylvania Avenue, NW
Washington, DC 20460

Re: Pennsylvania Builders Association Comments on the Proposed Chesapeake Bay TMDL Docket ID No. EPA-R03-OW-2010-0736

This document contains the comments of the Pennsylvania Builders Association (PBA) on the U.S. Environmental Protection Agency's (EPA) proposed Total Maximum Daily Load (TMDL) for the Chesapeake Bay, the availability of which was announced in the Federal Register on September 22, 2010.

The Pennsylvania Builders Association is a non-profit statewide trade organization chartered in 1952. It is affiliated with the National Association of Home Builders and a network of local associations throughout Pennsylvania. As the voice of more than 255,000 members and employees, the association represents all facets of the building and shelter industry by assisting local associations in directly serving the membership. Member firms are diverse in size, activities and locale, and include developers, remodelers, apartment owners, residential and light commercial builders, as well as subcontractors, suppliers, professionals, manufacturers and others related to the industry. Through PBA's efforts, the building industry is better able to serve the community and provide consumers optimum quality and value for the housing dollar.

PBA has been thoroughly engaged in the Chesapeake Bay TMDL development process and has also been heavily involved in providing input to the Pennsylvania Department of Environmental Protection (DEP) in its efforts to craft responses necessary to implement Bay pollution reduction measures. Because of the nature of their work, most of our members must obtain and operate pursuant to National Pollutant Discharge Elimination System (NPDES) permits for controlling the stormwater discharges stemming from their construction activities. The Chesapeake Bay TMDL's requirements will become a part of the stormwater permits issued for homebuilding projects in the Bay watershed.

The following comments concern three primary concerns of Pennsylvania's housing industry relative to the forthcoming Chesapeake Bay TMDL. The first is that the TMDL provide for the types of pollution reduction options necessary for home builders to continue to provide jobs and economic opportunities for residents of the Bay watershed, while ensuring that the dollars spent to improve the Bay's health will generate the maximum possible environmental benefit to the Bay. The second and related issue is the cost to builders—and the economy as a whole—of implementing the TMDL. The third is related to the acknowledged problems that exist with the Chesapeake Bay TMDL modeling and the implications of those problems, given that the model's results will determine the pollution reductions that will be required of each state, river basin, and industry affected by the Chesapeake Bay TMDL.

Issue #1: The TMDL must allow for innovative options to meet pollution reduction requirements, and EPA must facilitate, not hinder, existing cooperative efforts already underway in states like Pennsylvania.

Pennsylvania's home builders have always been stewards of the Chesapeake Bay and its ecosystem. Our activities across the watershed have been regulated at the federal, state, and local levels for many, many years, and those regulations have become more stringent over time. Because of the long-term emphasis placed on protecting environmental quality, most new developments in the Bay watershed must already install state-of-the-art stormwater management facilities, use low impact development practices, and follow sustainable design principles to ensure that the projects minimize pollution and other adverse environmental impacts.

In many cases, Pennsylvania builders have found that state and local government practices, policies and regulations represent impediments to designing and completing environmentally sensitive development. Many current codes and ordinances include mandates that are inconsistent with that objective. For example, requiring 40-foot residential streets or sidewalks on both sides of a roadway can significantly increase the amount of imperviousness and the associated stormwater discharging from a site. PBA has supported the development of a document by the Pennsylvania Housing Research Center, titled *Pennsylvania Standards for Residential Site Development*, which contains possible solutions for issues such as the preceding. It can be accessed at http://www.engr.psu.edu/phrc/Land%20Development%20Standards.htm.

At the same time, the occasion of the Bay TMDL would seem to be an auspicious opportunity to develop and promote innovative pollution reduction techniques that achieve the greatest possible environmental benefit at the least possible cost, with particular emphasis on programs that allow for pollutant trading and offsetting. Without viable such programs, the efforts of EPA, the Bay states, local governments, and private sector stakeholders to restore the Bay to health—no matter how well-intentioned—will ultimately fail because no other mechanism can do as much to channel scarce financial resources to the lowest-cost methods of pollution reduction. The composition of the pollutant load in states such as Pennsylvania, in which agriculture is by far the dominant source of nitrogen, phosphorus and sediment to the Bay, as well as the far lower

documented relative cost of pollutant removal achieved by agricultural best management practices (BMPs), argues powerfully for trading and offsetting as essential tools for the ultimate success of the Bay restoration efforts.

Given these realities, EPA must play a constructive role and allow and facilitate the use of innovative practices and principles, especially those related to trading and offsetting programs, which reduce environmental stresses on the watershed. In order to achieve the Bay cleanup in the most cost-effective manner possible, given the need to continue to provide jobs and opportunities for the people who will call the Bay watershed home today and in the future, it will be necessary to further identify and remove the roadblocks that exist to pollution trading and offsetting.

In particular, the stormwater pollutant reductions that will be mandated under the TMDL from new development, redevelopment, and the retrofit of existing impervious pavements in cities and towns will not be achievable without trading and adequate off-site mitigation alternatives. This is due to both the technical challenges posed by the urban setting and the cost of retrofits. Likewise, the future economic growth communities in the watershed will depend on the ability for new growth to purchase offset credits prior to construction. Further, without trading, agricultural entities, for the most part, will be unable to make sufficient pollutant reductions necessary to restore the Bay due to the sheer costs they may be asked to bear. Without a major contribution from agriculture that is proportional to agriculture's contribution to the impairment of the Bay, the Bay restoration goals may be unattainable.

PBA has created and championed a proposal to institute a stormwater BMP offsetting program for use by builders, municipal governments, and agricultural operations, and has discussed the details of the proposed program extensively with EPA officials. PBA is also currently involved in negotiations with the Pennsylvania DEP and other affected stakeholders regarding the structure of such an offsetting program. PBA's proposal is attached as an appendix to these comments. Finally, PBA has been intimately involved in the development of the existing DEP nutrient credit trading program, and continues to provide input as to how the program can be improved.

PBA is proud of the contributions that its members have made—often working collaboratively with representatives of state and municipal governments, sewage treatment plants, agricultural interests, environmental organizations, and other business groups—in developing Pennsylvania's response to the challenges posed by the Chesapeake Bay TMDL. In Pennsylvania, these diverse constituencies, which in the past had often worked in opposition to each other on Bay-related issues, have in recent years found myriad areas of agreement and have come together to find common solutions where possible. As a result, much faster and more substantial progress has been made on a voluntary, collective basis than had previously been achieved on an adversarial one.

PBA is very concerned, however, that the progress Pennsylvania has achieved will be undermined—and possibly reversed in some cases—by EPA's threatened "backstop allocations." The approach represented by the "backstop" strategy is precisely the

opposite of that which has begun to work so well in Pennsylvania. It pits one sector (sewage treatment plants) against others (urban-suburban stormwater and agriculture) in the hope that the treatment plants will advocate for stricter measures against the other sectors (and therefore avert the "backstop" allocation that they face), rather than encouraging the sectors to continue to collaborate in the service of their own interests and by so doing advance the cause of protecting the Bay. The more likely result under the "backstop" scenarios (including forcing sewage treatment plants to treat to the limit of technology, retrofitting existing urban areas, regulating more small farms as concentrated animal feeding operations, further tightening stormwater controls for new development, and imposing a higher "baseline" for trading and offsetting initiatives by non-point sources) will be that scarce public and private resources will be directed to relatively more costly, less efficient pollution reduction methods—an outcome that runs counter to that desired.

Finally, the TMDL EPA ultimately issues for the Chesapeake Bay watershed will drive the acceptable growth rate for communities within the watershed, including those in Pennsylvania. New growth within Pennsylvania's portion of the watershed will need to offset its pollutant contributions by drawing from an existing pollutant allocation, since the state has failed to set aside such an allocation in its Watershed Implementation Plan (WIP). Therefore, any new growth activities must purchase water quality credits, and an adequate program exists to allow new growth to purchase water quality credits. Without new growth, it is a virtual certainty that the billions of dollars likely necessary to implement the TMDL will not be generated.

Given these realities, PBA urges EPA to work with state and local governments and private sector stakeholders to support existing innovative pollution reduction approaches, such as the Pennsylvania nutrient credit trading program and the PBA stormwater offsetting proposal, rather than impose draconian requirements that will impede the development and refinement of such efforts. Also, though EPA has endorsed the concept of water quality credit trading and has an active technical committee, the Water Quality Trading Forum, examining trading, nothing visible has been done to put pen to paper to actually move towards developing a robust, interstate water quality credit trading program. This will prove extremely problematic as the TMDL is implemented.

A viable and fair interstate trading program must be in place as soon as possible, as a large, broad-based trading program supported by EPA would allow NPDES permit-holders to share in the low-cost agricultural BMPs that will be necessary to fund if the housing industry is to survive. To further assist in the development of water quality trading, the Chesapeake Bay Program should be working with the EPA's HQ permits section to provide appropriate trading language for incorporation into NPDES permits, identifying the elements necessary for an acceptable trading program in the Chesapeake Bay, and working to find an entity capable of overseeing the generation and selling of water quality credits. Home builders normally have short-duration permits of 9 months to a year, adding another complication to their participation in trading. However, without trading, there will certainly be further job losses in the housing industry during the beginning of the restoration program. PBA also strongly encourages the Chesapeake Bay

Program Office to consider sediment trading as well as nutrient trading for the same reasons explained in the above paragraphs.

Issue #2: The cost of implementing the Chesapeake Bay TMDL, including the identification of funding sources and the associated economic impact, has not been fully considered.

PBA believes that EPA must encourage innovative pollution reduction options and support Pennsylvania's existing collaborative approach to the Chesapeake Bay TMDL in large part because it is acutely concerned about the costs associated with the Bay's restoration efforts. The activities currently being considering regarding builders and developers, such as no new discharges and requiring special septic systems, will have significant and lasting impacts on the industry's ability to continue to run their businesses and provide affordable housing. Likewise, the extraordinary costs of this rule are likely to further depress the already troubled economies of the Bay states, decrease tax revenues, and add to job losses.

EPA must assess the cost implications and affordability associated with the regulatory requirements it considers. The cost of the proposed new requirements on new development, and redevelopment in urban centers, for example, are likely to be significant, and must be compared to other options that may be available to meet the same goals. The public is not an endless source of financing and the rule must be affordable to succeed. Many localities cannot currently afford to deliver the services needed by their citizens. Given the fiscal status of the federal and many state and local governments, as well as the continuing sluggishness of the national economy, serious questions exist as to where any proposed new public resources for the TMDL's implementation may come from. EPA has a responsibility to determine these costs, share that analysis with the public, and implement the most cost-effective solutions.

To be effective, the TMDL and its implementation plans must optimize costs and benefits and be designed to be implemented using available resources. To date, however, it is uncertain whether the proposal meets any of these goals, as EPA has included little data or information regarding how much the TMDL will cost or how its implementation will be funded. Absent this information, the public is at a loss to fully understand the overall plan or provide meaningful input. While EPA is quick to point out that the agency is not legally obligated to do a cost analysis for a TMDL, anyone who has had a hint of the potential cost of the new requirements will agree that a cost analysis is deserved for those who must foot the bill in these difficult economic times. A full cost analysis is also necessary because of the number of unique factors associated with the proposed Chesapeake Bay TMDL, including:

- It is unprecedented in size and scope, as it extends over portions of 6 states and Washington, DC, an area of 64,000 square miles, a total of 92 watersheds, and 17 million inhabitants;
- EPA expects it to be held up as a model for similar nutrient reduction programs that will occur around the country;

- EPA is, in this proposal, taking an expansive view of its authority regarding state decision-making over land use, use of state finances, the stringency of state WIPs developed to meet the rule, and other matters that have traditionally been left to the states;
- EPA intends to hold the states, municipalities, NPDES permit holders, and citizens responsible if the states do not live up to EPA's vision of complete compliance with the proposed rule; and
- The stringency of the new pollutant reduction requirements will significantly strain the already challenged state and local government budgets and may simply be unaffordable for the states and localities covered by the rule.

For Pennsylvania's housing industry, the costs of the TMDL will be borne by the in the form of land, planning, and carrying costs; installation and maintenance of BMPs; and, given that Pennsylvania has set aside no pollutant allocation for future growth, the requirement to offset all pollutant loadings from new construction activities. These will ultimately be felt in the market as a combination of higher prices and lower output for the housing industry.

As output continues to decline and jobs continue to be lost in Pennsylvania's housing industry, other sectors of the economy that buy from or sell to the housing industry will also contract and lose jobs. Builders and developers already are being crippled by the economic downturn and the ability of the home-buying public to absorb significant new costs and the TMDL will further exacerbate these challenges. Further, because compliance costs are incurred prior to the home sales, builders and developers will be required to pay carrying costs, which add additional cost to projects. Because the vast majority of our membership consists of small businesses, even moderate cost impacts or variations between regulatory options can have dramatic and significant negative market impacts.

This rulemaking also promises significant consequences for commercial builders, contractors, proponents of public infrastructure projects, and virtually any facility operator that is contemplating expansion. There will be serious ramifications and unintended negative impacts on state and local governments responsible for completing their own construction projects, while also overseeing the implementation of the TMDL through the state and local permitting programs. Obviously, the scope and the many unique features of the proposed rule alone constitute sufficient reason to conduct a comprehensive cost/benefit analysis of the Chesapeake Bay TMDL.

Issue #3: Questions persist regarding the accuracy of the Chesapeake Bay TMDL modeling.

Pennsylvania's home builders are also concerned that the science underlying development of the Chesapeake Bay TMDL modeling be complete and accurate. Given the size and complexity needed to develop a model replicating the 64,000-square mile Bay watershed, it is understandably time-consuming and challenging both to get it to

simulate existing conditions and to determine the effect that changes to the model itself produce in the bay (in effect, to allow it to predict conditions that have never existed).

EPA's stated plan is to produce a final TMDL by the end of 2010. To meet this deadline, the affected states must submit their final Phase I WIPs by November 29, 2010 for EPA's approval, at which time EPA will then approve or modify the state WIPs with backstop allocations. At the same time, however, EPA admits that the latest updates to the computer modeling, which were used to set the pollutant loading targets for both the TMDL and the WIPs, have proven to be unreliable. Therefore, the pollutant loadings that will be part of the "final" TMDL approved by December 31, 2010 are to be considered "provisional." If necessary, after fixing the computer modeling, EPA will reopen the TMDL in 2011 to finalize the state loadings allocations for pollutants.

At the same time, the TMDL and its implementation plans must be supported by data and modeling that is credible, reproducible, and transparent. Much of the data that is said to support the TMDL, however, has either not been made available or is otherwise so technically complex and complicated that review in such a short period of time is impossible. The computer modeling that forms the basis of the proposed Chesapeake Bay TMDL is exceedingly complex, expensive, and unique, making it unlikely that similar computer models could be duplicated for other watersheds anywhere else soon. EPA has described the modeling development in Section 6 of the proposal, including how the state and watershed pollutant loadings were developed.

However, many supporting documents for the modeling that explain EPA's assumptions about such modeled characteristics as land use within the watershed, the amount and growth of impervious pavement surfaces, Best Management Practices (BMPs) in place in the Bay states, "acceptable" BMPs that states may use to meet the TMDL, etc. are not currently available in the docket. Therefore, the basic background assumptions of the modeling, the available technologies to reduce the regulated pollutants, population growth estimates, the data sources for EPA's estimates of the deposition of pollutants from airborne emissions, etc. are not available for review by the public.

Any TMDL, especially one which will have such a significant impact on the states covered by the rule, should not be finalized when it is known to have deficiencies, and PBA urges EPA to fix the modeling and publish it for public review and comment before finalizing the TMDL.

Conclusion

Pennsylvania builders clearly are on the front line of defense when it comes to protecting the Bay. While challenges still remain, most builders are operating on the edge of technology in terms of what they can feasibly achieve, and thus there are limited improvements that can be garnered from the industry. Despite these demonstrable gains, improvements, and impediments, many still blame the development community for the majority of the problems in the Bay and other watersheds, although even EPA's estimates show that new construction is not a leading source of pollution problems, "Urban

pollutants" do not come solely from new construction, and new construction should not be required to address 100% of that that contribution. It is the responsibility of all who live, work, and play in urban areas to help reduce their collective contributions. EPA has already addressed the "during construction" phase and requires extensive controls and best management practices to ensure that sediment does not flow off construction sites.

If progress is to be made in restoring the Bay, all sources of pollution must be addressed and the greatest emphasis must be on the biggest sources of pollution in a cost-effective manner—all the while being guided by accurate science on the Bay's condition. For example, the agency's focus should be on runoff from agricultural activities, as these are the biggest contributors of nitrogen, phosphorus, and sediment. PBA believes that the "stormwater BMP offsets" proposal included as an appendix to these comments has the potential to cost-effectively address this major source of the Bay's impairment while allowing for desperately needed economic growth to continue. Such an option would allow EPA and the states to work together to develop and implement a coordinated and enforceable strategy for addressing discharges from agricultural activities while accommodating and planning for future growth around the Bay.

Thank you very much for the opportunity to submit these comments. We look forward to the opportunity to continue to discuss our concerns and proposed solutions with you in greater detail as the TMDL process continues. If you have questions or would like more information, please contact Grant Gulibon, PBA regulatory specialist, at 717-730-4380, ext. 3013 or at ggulibon@pabuilders.org.

APPENDIX
PROPOSAL FOR PAYMENT OF A FEE BY LAND DEVELOPERS TO CONVERT OFF-SITE UNFORESTED STREAMSIDE AREAS TO FORESTED RIPARIAN BUFFERS

A new payment of fee option would be included in the model stormwater ordinance endorsed by PA D.E.P., **and** as part of NPDES regulations for stormwater discharge. The fees would be used for planning and physical installation of riparian forested buffers off of the developing site. The fee should be used if at all possible along a water way that receives runoff from the land development project, and as close to the project as feasible.

For simplicity, the fee amount would be tied to the **amount of increased impervious coverage** being created on a site. Existing pre-development (historical) impervious coverage would be credited since it is already generating runoff and hypothetical pollutants and thermal issues. Impervious area is an easily documented land use, and this use generates the most environmental issues (versus land use conversion of meadow to lawn). Proposed pervious pavement (porous concrete and asphalt, or interlocking pavers) would be credited, so there is an incentive for a developer to use such products over traditional pavements. Fees would be paid into a forested riparian buffer creation fund established within each county, to be administered by the county conservation district.

Each county conservation district would study streams in their county and maintain an inventory of areas where forested buffers are desirable. Initial mapping study could be done using recent aerial photos available on the internet; this could be supplemented by drive-by site visits as needed. The county conservation district, or designated entity, would work with landowners, and prepare detailed buffer installation plans, and implement those using the fees collected. Physical installation would most likely be via a hired contractor. Should a county run out of, or not have suitable areas for buffer implementation at a moment in time, the funds could be transferred to counties in a downstream watershed that receives runoff from the developing county.

A land developer would have the option to pay into the fund rather than implement normally required BMPs within the new development. This gives the developer three options:

--Implement BMPs per the BMP Manual (per the current scenario);
--Pay a fee for installation of off-site forest buffers (BMPs), and not implement BMPs on site (whether by choice, or because it is not physically possible to infiltrate due to soil and/or bedrock conditions); or
--A combination of the above: treat some areas on-site, and pay for other untreated on-site areas.

Note that stormwater release rate would still have to be regulated on the site per the municipal (or county) stormwater ordinance (the traditional requirements). Consequently, there would still likely be some treatment of runoff in the traditional detention basins that would be implemented.

The proposed fee schedule is based on information provided by the Dauphin County Conservation District on a forested buffer project in Dauphin County. Per that study, the cost of installation of one acre of forested riparian buffer is $2,270. For this proposal, we suggest rounding the cost amount up to an even $2,300. The simple fee schedule for a developer would be as follows:

Pay $2,300.00 for each acre of increased impervious area for which BMPs are not being provided per the BMP Manual.